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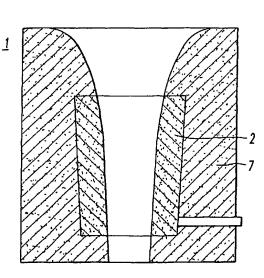
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### (54) Title: PERMEABLE REFRACTORY MATERIAL FOR A GAS PURGED NOZZLE



(57) Abstract: A permeable, resin-bonded composition is described, which finds utility as a porous element in a gas-injection nozzle. The permeable composition is notably useful in a canless, resin-bonded, gas-injection nozzle, characterized by an impermeable, resin-bonded composition replaces the metal can. Advantageously, the resin-bonded compositions include an oxygen getter for scrubbing oxygen before the oxygen can reach the molten steel. A method of manufacturing the nozzle is described and includes copressing a standard, resin-bonded composition around the permeable, resin-bonded composition. The pressed piece may be cured at temperatures below about 800 °C.

